

## ABSTRACT

An integrated risk management tool includes a persistent object database to store information about actors (individuals and/or groups), physical surroundings, historical events and other information. The risk management tool also includes a decision support system that uses data objects from the database and advanced decision theory techniques, such as Bayesian Networks, to infer the relative risk of an undesirable event. As part of the relative risk calculation, the tool uses a simulation and gaming environment in which artificially intelligent actors interact with the environment to determine susceptibility to the undesired event. Preferred embodiments of the tool also include an open “plug-in” architecture that allows the tool to interface with existing consequence calculators. The tool also provides facilities for presenting data in a user-friendly manner as well as report generation facilities.